

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for detecting a biochemical ~~reagin~~reactant comprising the steps of:

hybridizing a biochemical specimen with ~~probe~~a nucleic acids probe on a biochip, ~~having a probe the nucleic acid probe forming including a configuration of~~ a loop structure and arrayed on one ~~or two~~ or more electrodes provided on a surface of a substrate or substrate analog or ~~a probe the nucleic acid probe with of~~ said configuration ~~with~~ but further including a label modification added in advance; and

detecting/discriminating a complex of the ~~probe~~nucleic acid probe and ~~forming a double chain with~~ the biochemical specimen, forming a double chain, by means of at least one of electrical, magnetic ~~or~~ and optical changes on the surface of the biochip.

Claim 2 (currently amended): A method for detecting a biochemical ~~reagin~~reactant comprising the steps of:

hybridizing a biochemical specimen with a ~~probe~~nucleic acid probe on a biochip, ~~having a probe the nucleic acid probe forming including a configuration of~~ a loop structure and arrayed on one ~~or two~~ or more electrodes provided on a surface of a substrate or substrate analog or ~~a probe the nucleic acid probe with of~~ said configuration ~~with~~ but further including a label modification added in advance;

modifying with a label either during or after hybridization one or both of the biochemical specimen and the probe nucleic acid forming a double chain; and

detecting/discriminating a complex of the probe nucleic acid ~~forming a double chain with~~ and the biochemical specimen, forming a double chain, by means of at least one of electrical, magnetic ~~or~~ and optical changes on the surface of the biochip.

Claim 3 (currently amended): A method for detecting a biochemical ~~reagin~~reactant comprising the steps of:

Claim 6 (currently amended): A method for detecting a biochemical ~~reagin~~reactant according to any one of Claims 1 through 4, wherein ~~in the detection/discrimination step~~ includes measurements are performed measuring, before and after the hybridization operation and/or before and after the label modification operation, ~~to assess at least one of electrical, magnetic and optical changes to the surface of the biochip, and~~ comparing these results ~~are compared~~.

Claim 7 (currently amended): A method for detecting a biochemical ~~reagin~~reactant according to any one of Claims 1 through 4, wherein ~~in the detection/discrimination step~~ includes measurements are performed measuring, before the hybridization operation, ~~to assess at least one of electrical, magnetic and optical changes to the surface of a biochip having a plurality of electrodes, and the relative amounts of probe the nucleic acids~~ probe on each electrode are calculated in advance and used as a ~~correction~~ corrective reference for ~~the measurement~~ measured values after each step.

Claim 8 (currently amended): A method for detecting a biochemical ~~reagin~~reactant according to any one of Claims 1 through 4, wherein ~~the a pre-modification with a label of the probe nucleic acid~~ probe or ~~the biochemical specimen is a multi-stage modification of two or three or more stages in which a second label is added targeting a previous attached first label~~ previously attached.

Claim 9 (currently amended): A method for detecting a biochemical ~~reagin~~reactant according to any one of Claims 1 through 4, wherein ~~the method of modifying the probe nucleic acid~~ probe or ~~the biochemical specimen with a label is a multi-stage modification in two or three or more stages in which a~~ modification with a first label is followed by a modification with a second label targeting the first label.

Claim 10 (currently amended): A method for detecting a biochemical ~~reagin~~reactant according to any one of Claims 1 through 4, wherein the label is selected from among fine metal

Claim 22 (currently amended): A biochip according to any one of Claims 15 through 19, wherein the substrate or substrate analog ~~thereof~~ is capable of being embedded in a separately prepared electrical circuit board.